CLAIMS

1. Method for recognizing a keyword from a spoken utterance,
   with at least one keyword model and a plurality of garbage
   models, **wherein**

5   a part of the spoken utterance is assessed as the keyword to
     be recognized, if that part matches best either to the
     keyword model or to a garbage sequence model,
     and wherein the garbage sequence model is a series of
     consecutive garbage models from that plurality of garbage

10   models.

2. The method according to claim 1, **wherein** the garbage sequence
   model is determined
   - by comparing a keyword utterance, which represents the
   keyword to be recognized, with the plurality of garbage

15   models and
     - detecting the series of consecutive garbage models from
     that plurality of garbage models, which match best to the
     keyword to be recognized.

3. The method according to claim 1 or 2, **wherein**

20   - the determined garbage sequence model is privileged against
     any path through the plurality of garbage models.

4. The method according to any of the claims 1-3, further
   - determining a number (N) of further garbage sequence
   models, which also represent that keyword to be recognized,

25   and
     - assessing the part of the spoken utterance as the keyword
     to be recognized, if that part of the spoken utterance
     matches best to any of that number (N) of garbage sequence
     models.

30 5. The method according to claim 4, **wherein** the total number
      (N+1) of garbage sequence models are determined:
      - by calculating for each garbage sequence model a
      probability value and

    - selecting those garbage sequence models as the total number (N+1) of garbage sequence models, for which the probability value is above a predefined value.

6. The method according to any of the claims 1-5, further
   - detecting a path through the plurality of garbage models, which matches best to the spoken utterance,
   - calculating a likelihood for that path, if the garbage sequence model is contained in that path and
   - wherein for assessing a part of the spoken utterance as the keyword to be recognized, that path through the plurality of garbage models is assumed as the garbage sequence model, when the likelihood is above a threshold.

7. The method according to claims 6, **wherein**
   - the likelihood is calculated based on the determined garbage sequence model and the detected path through the plurality of garbage models and a garbage model confusion matrix, and
   - wherein the garbage model confusion matrix contains the probabilities $P(i|j)$ that a garbage model i will be recognized supposed a garbage model j is given.

8. The method according to claim 7, **wherein** the likelihood is calculated with dynamic programming techniques.

9. The method according to any of the claims 1-8, **wherein** the at least one garbage sequence model is determined, when a keyword model is created for a new keyword to be recognized.

10. The method according to any of the claims 1-9, **wherein** the keyword utterance is speech, which is collected from one speaker.

11. The method according to any of the claims 1-9, **wherein** the keyword utterance is speech, which is collected from a sample of speakers.

12. The method according to any of the claims 1-9, wherein the keyword utterance is a reference model.

13. A computer program product with program code means for performing the steps according to one of the claims 1 to 12 when the product is executed in a computing unit.

14. The computer program product with program code means according to claim 13 stored on a computer-readable recording medium.

15. An automatic speech recognition device 100, implemented the method according to any of the claims 1-12, including
 - a pre-processing part (110), where a digital signal from an utterance, spoken into a microphone (210) and transformed in an A/D converter 220 is transformable in a parametric description;
 - a memory part (130), where keyword models, SIL models, garbage models and garbage sequence models are storable;
 - a pattern matcher (120), where the parametric description of the spoken utterance is comparable with the stored keyword models, SIL models, garbage models and garbage sequence models;
 - a controller part (140), where in combination with the pattern matcher (120) and the memory part (130), the method for automatic speech recognition is executable.

16. A mobile equipment, with an automatic speech recognition device according to claim 15, wherein the mobile equipment is a mobile phone.